

# ALASKA CAPITAL ENGINEERS

FEBRUARY 2020



## Upcoming Events

**Luncheon:** February 5th

**Speaker:** David Gamez &  
Dan Nichols

**Topic:** ASCE Infrastructure  
Report Card

## Alaska Professional Design Council (APDC) Fly-In

February 5<sup>th</sup> & 6<sup>th</sup>

## Juneau Branch of ASCE Awards & Scholarship Banquet

February 29<sup>th</sup> at The Travel  
Lodge

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## Luncheon Menu

Wednesday February 5<sup>th</sup>  
at 11:30 at the Ramada Hotel

\$25 per person

Contact Ethan Roemeling to submit ideas for luncheon speakers:

[EthanRoemeling@pdceng.com](mailto:EthanRoemeling@pdceng.com)

# ASCE Juneau President Message

Dear Alaska Capital Engineers,

February is the busiest month of the year for our branch of ASCE and with that comes many opportunities for our members. The first opportunity begins on February 5th-6th with the Alaska Professional Design Council (APDC) Legislative Fly-In. The APDC is a consortium of professional societies representing more than 5,000 licensed design professionals (engineers, architects, land surveyors, and interior designers) in Alaska. APDC is a forum for collaboration on issues of shared interest through education and advocacy.



One of the key topics this year during the APDC fly-in will be the importance of State infrastructure, specifically with respect to the Alaska Infrastructure Report Card. The first report card for the state of Alaska was put out in 2017 and work has just kickstarted with an updated report card scheduled for 2021. For our monthly Juneau Branch Luncheon, we will be hearing from David Gamez (Alaska Section ASCE President) and Dan Nichols (Anchorage Branch Past President). Both David and Dan contributed to the development of the original Alaska Infrastructure Report Card.

To help accommodate those who are in town for the fly-in we will be changing up the location of the Luncheon this month. The luncheon will be held Wednesday, Feb. 5 at 11:30 at the Ramada Hotel (TK Maguire's). This will be a great opportunity to meet some other engineers from across the state as well as several University of Alaska students who will be participating in the fly-in. We would like to encourage everyone who is available to attend to help represent our branch.

At the end of the month we have the Juneau Branch of ASCE Awards and Scholarship Banquet. The banquet will be held on Saturday February 29th, at the Mi Casa Restaurant. Commissioner Mackinnon of the Alaska Department of Transportation will be our keynote speaker and we will be awarding our Engineer of the Year and Project of the Year awards.

I look forward to seeing you at our events this month.

Thank you,

Ethan Roemeling  
President  
Juneau Branch ASCE

# February Luncheon



## Alaska Infrastructure Report Card

BY David Gamez & Dan Nichols

*Wednesday February 5<sup>th</sup>, beginning at 11:30am  
at the Ramada Hotel*

### Introduction

Alaskans think about infrastructure a little bit differently than the rest of the United States. Alaska's infrastructure is truly unique, covering a vast area of over 663,000 square miles and supporting a population of just over 730,000. As Alaska legislators address budget challenges, the Alaska Report Card – developed for Alaska, by Alaskans – demonstrates the importance of infrastructure investment. There are solutions to Alaska's poor infrastructure grades! Together with the information provided in the Report Card for Alaska's Infrastructure, it is ASCE Alaska Section's hope that Alaska's Civil Engineers can work together with state leaders to plan, design, build, operate and maintain safe, efficient and sustainable infrastructure for all Alaskans.

### Get Involved

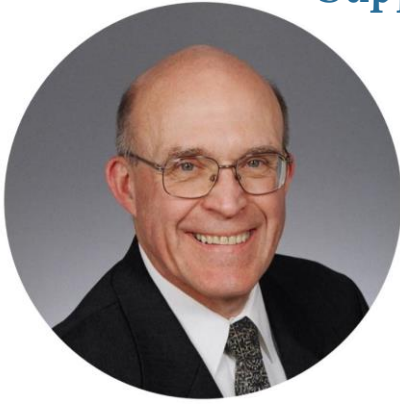
The 2017 report card for Alaska's infrastructure was one of the largest and most successful projects completed by the Alaska Section. Categories will be prepared for aviation, highways, bridges, dams, energy, water/wastewater, solid waste, ports and harbors, and the marine highway system. If you are interested in volunteering as a lead author, co-author, or peer reviewer, please reach out to Tor Anderzen at [tjanderz@mtu.edu](mailto:tjanderz@mtu.edu).

### Speaker Biographies

David Gamez currently serves as the ASCE-Alaska Section President and was a contributor to the roads section of the Report Card. He is a Civil Engineer with Lounsbury & Associates specializing in geometric design and signalization on highway projects. He holds a B.S. in Civil Engineering from California State University, Fullerton. He is experienced in several aspects of roadway and site design for public agencies across Alaska and the Pacific Northwest.

Dan Nichols was the lead writer on the Water and Wastewater section of the Alaska Report Card. Dan works for WHPacific as the Director of Facilities. He has over 20 years engineering and construction experience in Alaska and is a specialist in rural and arctic engineering and worked extensively throughout Bush Alaska on water and wastewater projects.

## Support the Endowment of the Dale Nelson Memorial Civil Engineering Scholarship Fund



Dale Albin Nelson, PE, F.ASCE 14 December 1944 – 01 January 2019

Growing up in Washington, Dale worked at his parents' logging and sawmill business as well as at his grandparents' cattle ranch. Completing his degree in Civil Engineering, Dale realigned his dream and moved to Alaska, where he worked for the U.S. Army Corps of Engineers at Fort Richardson. Soon after, Dale married Elaine, and they were blessed with two children: Garth Nelson, a registered civil engineer, and Lesa Zimnawoda, an environmental scientist.

Committed to strong family values, Dale was a strong role model for Anchorage youth, teaching positive work ethic, compassion, and community involvement, and a stalwart proponent of young engineering professionals, providing powerful mentorship and advocacy. He distinguished himself as an active and influential member of ASCE, assuming leadership responsibility within ASCE beginning in 1971, serving all positions within the Board of Directors of the Anchorage Branch and the Alaska Section, and as a Regional Governor and Director. In October 1999, Dale was elevated to the ASCE Fellow status and he became a life member in 2009. Throughout his career, Dale was admired and well respected by the engineering community he so passionately served.

### Dale Nelson Memorial Civil Engineering Scholarship Fund

In his honor and memory, Dale's family established the Dale Nelson Civil Engineering Memorial Scholarship, which is currently gathering funds through the University of Alaska Foundation in a holding account. Current funding has reached \$22,000, and it is hoped that the \$25,000 level needed for an endowed scholarship will be reached soon.

### Your Financial Support

If you are able to contribute, you may do so online (<https://engage.alaska.edu/>, select "Other" as designation, and write "Dale Nelson Memorial Scholarship Fund" in the comment section), by check (checks payable to "University of Alaska Foundation" and write "Dale Nelson Memorial Scholarship Fund" in the memo section), or by wire transfer (contact the University of Alaska Foundation at 907-450-8030 or [foundation@alaska.edu](mailto:foundation@alaska.edu) for details).

Checks may be mailed to:

University of Alaska Foundation  
2025 Yukon Drive  
PO Box 755080  
Fairbanks, AK 99775

University of Alaska Foundation  
1815 Bragaw St., Ste.203  
Anchorage, AK 99508



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# Deputy Port Engineer

## Full-Time Position

### Position open until filled



This is the first level registered professional engineer (PE) or architect. Work is performed under general direction. Independently performs most assignments with instruction as to the desired outcome. Receives instructions on specific assignment objectives, complex features and possible solutions. Provides professional management of engineering, architectural and construction projects. May lead the work of lower level engineering/architectural staff.

Typical responsibilities include the following:

Assists in the preparation of and/or prepares drawings, specifications, cost estimates, reports, contracts and requests for proposals (RFPs); utilizes professional seal where appropriate.

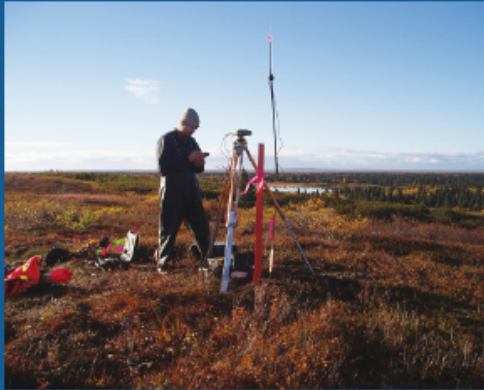
- Provides technical architectural, engineering, and landscape architecture services and/or support for projects that construct new, or renovate or modify existing, CBJ owned or operated facilities.
- Assists with and/or conducts negotiations related to professional service contracts.
- Reviews and/or creates permit applications, including plans and drawings and specifications for compliance with regulatory codes and standards.
- Serves as a CBJ representative for management of multiple planning, design and construction projects.
- Manages and conducts project activities to ensure CBJ's interests are protected.
- Continuously monitors and inspects construction work quality, workmanship, and material selection to ensure compliance with contract documents; identifies deficiencies; recommends corrective actions; coordinates the resolution of issues between parties.
- Issues Stop Work orders, Notices of Defective Work and imposes other contractual mechanisms to contractors not complying with the contract documents.
- Monitors contractor's construction safety program and maintains safe practices for CBJ personnel at the construction site.
- Proposes and implements a dispute resolution program.
- Develops project budgets; provides fiscal control of projects; reviews and approves expenses charged to projects; administers professional design and construction contracts for timely completion; establishes and maintains the financial project records; and assists in financial audits.
- Determines appropriate insurance and bonding limits and amounts for a variety of project types.
- Designs, conducts and manages specialized studies; identifies alternatives and makes recommendations.
- Assesses project needs and hires, or recommends the hire, of qualified staff to provide high quality public service.
- Prepares reports regarding the status of projects.
- Trains other CBJ staff on project management, documentation and CBJ policies and procedures.
- Supervise and direct staff
- Makes oral and written presentations to the Assembly, Docks & Harbor Board, Commissions, Client Department groups and the public.
- Develops and implements departmental policies and procedures.
- Other related duties as assigned.

**For more information and directions on how to apply, visit the City and Borough of Juneau Website.**



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We always have room for more talent. If this position isn't the right one for you but you still feel like you'd be a great addition to our team, visit [www.PDCENG.com/open-positions](http://www.PDCENG.com/open-positions) and let us know what position you're interested in. We'll make sure your information gets into the right hands.



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## Professional Land Surveyor

### Position Opening

#### Location: Juneau, Alaska

PDC Engineers is seeking an experienced Professional Land Surveyor to join our full-service engineering team and lead and grow our Southeast Survey Department in Juneau, AK. We design innovative world-class projects utilizing state-of-the-art technologies from five offices throughout Alaska. We offer competitive pay and excellent benefits that includes paid time off (PTO), eight (8) paid holidays/year, healthcare, group life/disability, retirement, education reimbursement and advancement opportunities. PDC is a 100-percent employee-owned company.

The successful candidate will be licensed as a Professional Land Surveyor (PLS) in the state of Alaska. Duties include establishing legal boundaries of properties, subdivision plats, Dept. Of Natural Resources plats (ASLS, ATS, Accretions). This position facilitates work for small to large projects and entails the ability to work on many type of survey works, collaborating with multi-discipline engineering staff, clients, and other invested individuals to review and coordinate findings; interprets survey data and calculates geodetic measurements to determine shapes, positions, and elevations of geomorphic and topographic features. Schedules, assigns, supervises work of survey parties, engages in collection, processing and mapping of survey data. Provides advanced professional, technical, day-to-day support, guidance, and input to staff and other team members. Prepares project submittals to ensure that project budgets are met and reviews each project upon completion for quality assurance.

#### Qualifications/Skills:

- Registered land surveyor in Alaska
- 5+ years of relevant work experience
- Proficient in Trimble Business Center and AutoCAD with Civil 3D desired
- Experience with GPS equipment, total station instruments, data collectors
- Boundary, control, Bathymetric, and topographic survey experience
- Thorough understanding of the principles, practices, and procedures of land surveying
- In depth knowledge of federal and state laws related to land surveying
- Excellent mathematical skills to conduct land survey analysis
- Strong verbal & written communication skills
- Ability to work on multiple projects concurrently and meet deadlines

Submit your resume to **PDC Engineers, Attn: Human Resources, 6205 Glacier Highway, Juneau, AK 99801** or at [jobs@pdceng.com](mailto:jobs@pdceng.com). Open until filled.

Anchorage | Fairbanks | Juneau | Palmer | Soldotna



## proHNS is Hiring (Civil Engineer)

### Haines, Alaska

This position, based in Haines, AK, will manage a variety of interesting projects and hone your skills in site development, production of construction drawings and specifications, design of utilities, and construction of government-owned facilities. Most of our projects include all aspects of civil engineering design through on-site construction inspection and contract administration. This job requires professionalism, out-of-the-box thinking, open communication, and a willingness to push the limits of one's expertise. For the right candidate, this is a position that allows for putting down lasting roots in Haines while also continuing to grow with proHNS.

Successful candidates will have at least five years of relevant professional experience, a bachelor's degree in civil engineering or related field, and an Alaska Professional Civil Engineer license (or ability to obtain within one year). Preferred skills include proficiency in AutoCAD Civil 3D and other engineering software applications, solid time management skills, and ability to produce accurate, high-quality work under deadline.

We offer competitive pay, paid personal leave, a SIMPLE IRA retirement program, eligibility for annual performance bonuses, a relocation stipend, and more. To learn more about the position, visit [www.proHNS.com/careers](http://www.proHNS.com/careers). Submit your cover letter, resume, and references to [solutions@proHNS.com](mailto:solutions@proHNS.com).

# MATHCOUNTS®



The MATHCOUNTS Foundation is a 501(c)3 non-profit organization that reaches students in grades 6-8 in all US states and territories with extracurricular math programs. More than a quarter million students participate each year.

<https://www.mathcounts.org/>

For information on MATHCOUNTS in Juneau, or to volunteer, contact Doug Murray ([dougmurray@pdceng.com](mailto:dougmurray@pdceng.com))

*Members of last year's Southeast regional MATHCOUNTS winning team from Dzantik'i Heeni Middle School. From left: coach Mary Borthwick, Marina Lloyd, Krishna Bathija, Addy Mallott and Edward Hu. (Kevin Gullufsen | Juneau Emire)*

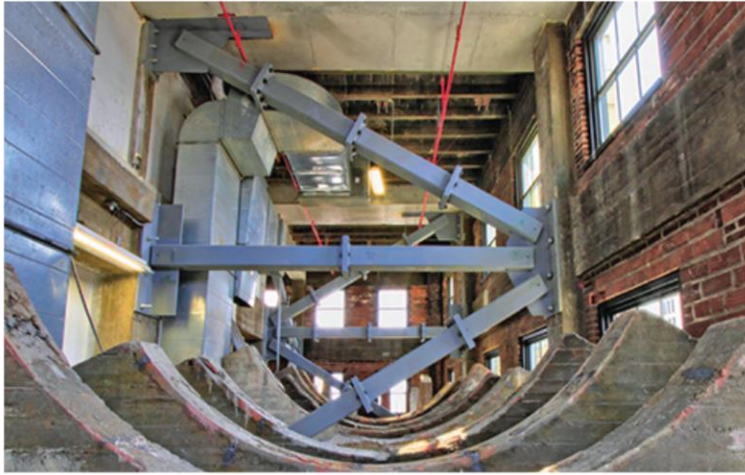


All around the world, engineers are pushing the limits of ingenuity and innovation in unexpected, imaginative, and amazing ways. Dream Big: Engineering Our World, a giant-screen film about engineering, takes viewers on a journey of discovery from the world's tallest building to a bridge higher than the clouds. Along the way, the audiences witness how today's engineers are shaping the world of tomorrow.

[Available on Netflix](#)



# ASCE News Brief



## Seismic Success

BY Robert L. Reid

An innovative seismic retrofit has prepared the nearly 90-year-old Robert A. Young Federal Building in St. Louis for the future. Despite extensive work within the 1 million sq ft structure, the building remained fully occupied throughout the roughly two-and-a-half-year construction phase.

*Photograph courtesy of McCarthy Building Companies Inc.*

The Robert A. Young (RAY) Federal Building is a massive structure, measuring roughly 1 million sq ft in size, spread over a 3-acre site in downtown St. Louis. Completed in 1933, the concrete-framed facility features one basement level and 10 stories aboveground for most of its footprint, with a tower on the building's northeast corner rising an additional 11 stories. Over the decades, the RAY building served first as a railroad warehouse before being acquired by the federal government for the Army in the 1940s. In 1961 it was turned over to the U.S. General Services Administration (GSA), at which time it was converted to office space.

Despite its size and apparent sturdiness, the RAY building was considered vulnerable to seismic activity because of its location within 150 mi of two seismic zones—the Wabash Valley and New Madrid faults. An "upsurge in frequency and intensity of seismic activity in the area" led the GSA, which manages the property, to analyze the building's seismic performance over a decade and eventually propose a seismic renovation, according to an alteration prospectus prepared by the GSA in 2013. The goal was to provide the building's roughly 3,000 daily occupants with "both shelter in place opportunities during and safe exit from the building following a seismic event," the GSA noted.



*Photograph courtesy of McCarthy Building Companies Inc.*

[Read More >>>](#)

### Professional Development Hours

The ASCE Juneau Branch will provide electronic continuing education development hour certificates for those who are interested in tracking development hours received by attending the Alaska Capital Engineers Luncheons to hear speakers present on engineering topics. Certificates can be found on the branch webpage: <http://branches.asce.org/juneau/>

### ASCE Juneau Branch Website

Bookmark this website for easy access to the events calendar, PDH certificates, new and archived newsletters, contact information and much more:

<http://branches.asce.org/Juneau/>

For questions or concerns regarding the Juneau Branch ASCE website, please contact Ethan Roemeling.

### AccessEngineering

Developed in partnership with McGraw-Hill Education, ASCE members now have FREE and unlimited usage of this award-winning engineering reference tool:

[www.asce.org/AccessEngineering](http://www.asce.org/AccessEngineering)

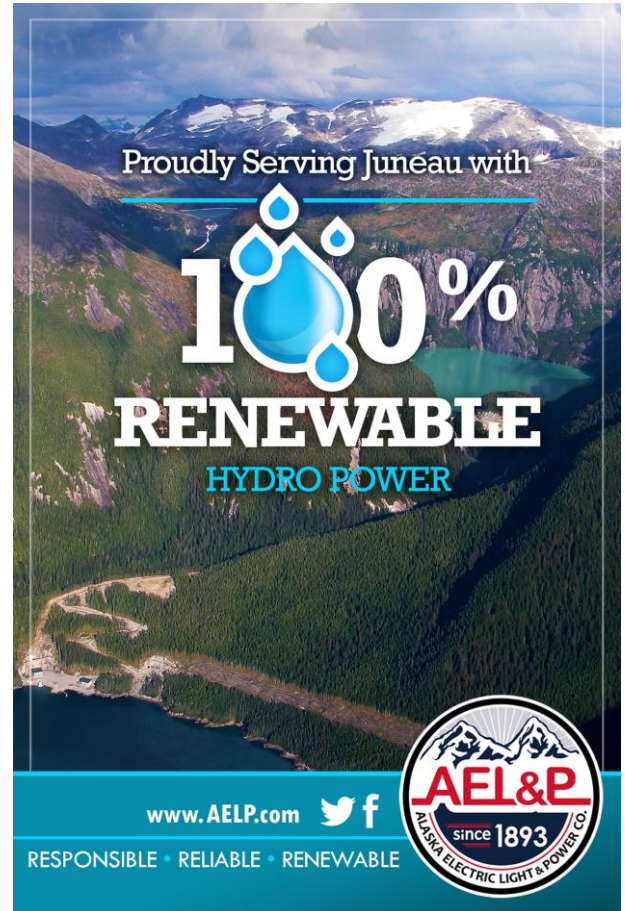


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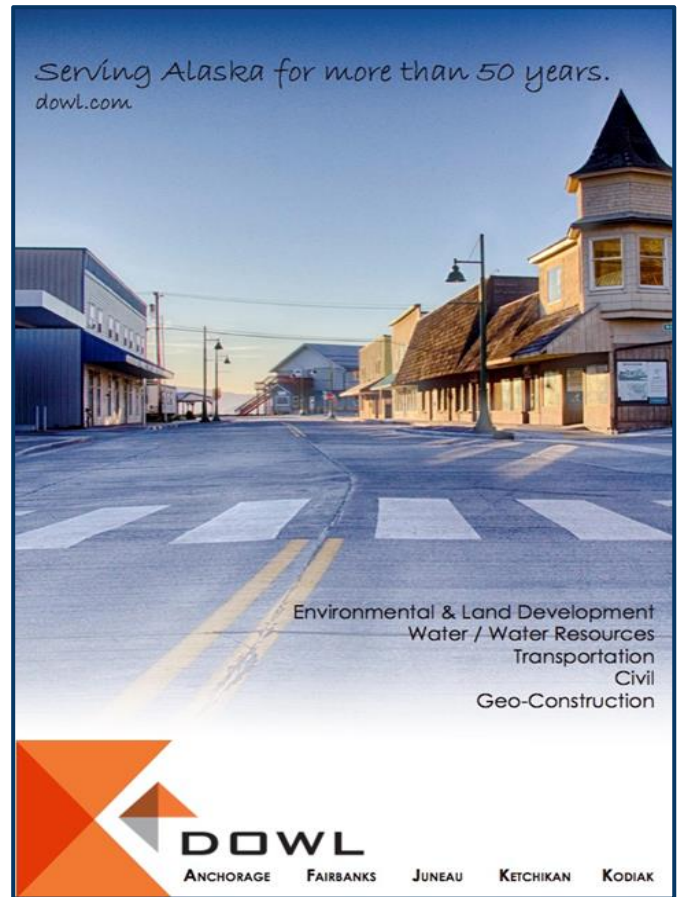
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## Membership and Renewal

Thank you for your continued membership and support for ASCE and NSPE. Our professional organizations provide a great opportunity to network with other members of the engineering profession. Select the links below for society membership information.

[ASCE Membership Information](#)

[NSPE Membership Information](#)

## *2019-2020 Alaska Capital Engineers Officers*

### ASCE

President – Ethan Roemeling, EIT

Vice President - Lucas Chambers, PE

Treasurer – Janice Wells, EIT

Secretary – Micki Minsch, EIT

Past President – Matt McGuan, PE

Emeritus – Naomi Hobbs, PE

### Special Committees

School Outreach/STEM Coordinator - Please Volunteer

Dream Big Coordinator - Please Volunteer

### ASPE - Alaska Society Contacts

Past President - Jeanne Bowie, PE

President - Chris Miller, PE

President Elect – Craig Bledsoe, PE

Secretary - Leora Houtary, PE

Treasurer - Michael Spano, EIT

NSPE House of Delegates - Brad Fristoe, PE

Anchorage Chapter Director – Brian Lamson, PE

Fairbanks Chapter Director - Frank Wuttig, PE

Juneau Chapter Director - Darrell Wetherall, PE

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